

Title (en)

METHOD OF PRODUCING A PART WITH VERY HIGH MECHANICAL PROPERTIES FROM A ROLLED COATED SHEET

Title (de)

VERFAHREN ZUM HERSTELLEN EINES BAUTEILS MIT SEHR GUTEN MECHANISCHEN EIGENSCHAFTEN AUS GEWALZTEM UND BESCHICHTETEM STAHLBLECH

Title (fr)

PROCEDE DE FABRICATION D'UNE PIECE A TRES HAUTES CARACTERISTIQUES MECANIQUES A PARTIR D'UNE TOLE LAMINEE ET REVETUE

Publication

EP 1943368 A1 20080716 (FR)

Application

EP 06820214 A 20061012

Priority

- FR 2006002316 W 20061012
- FR 2005002689 W 20051027

Abstract (en)

[origin: WO2007048883A1] The invention relates to a method of producing a part with very high mechanical properties from a rolled coated sheet. According to the invention, more than 90 % of the thickness of a steel part is coated with a compound which comprises at least one Fe-Zn-based phase that is rich on iron and which is formed by at least one alloying heat treatment between the steel and a pre-coat, said pre-coat consisting of a zinc alloy containing between 0.5 and 2.5 wt.-% aluminium and optionally one or more elements selected from Pb = 0.003 wt.-%, Sb = 0.003 wt.-%, Bi = 0.003 wt.-%, 0.002 wt.-% = Si = 0.07 wt.-%, La < 0.05 wt.-%, Ce < 0.05 wt.-%, the remainder comprising zinc and inevitable impurities.

IPC 8 full level

C23C 2/26 (2006.01); **C23C 2/28** (2006.01)

CPC (source: EP KR US)

B32B 15/013 (2013.01 - EP KR US); **C21D 8/0236** (2013.01 - EP KR US); **C21D 8/0278** (2013.01 - EP KR US); **C21D 9/46** (2013.01 - EP KR US); **C22C 18/00** (2013.01 - EP US); **C22C 18/04** (2013.01 - EP KR US); **C22C 38/002** (2013.01 - EP KR US); **C22C 38/02** (2013.01 - EP KR US); **C22C 38/04** (2013.01 - EP KR US); **C22C 38/06** (2013.01 - EP KR US); **C22C 38/18** (2013.01 - EP KR US); **C22C 38/26** (2013.01 - EP KR US); **C22C 38/28** (2013.01 - EP KR US); **C22C 38/32** (2013.01 - EP KR US); **C23C 2/06** (2013.01 - KR US); **C23C 2/28** (2013.01 - EP US); **C23C 2/29** (2022.08 - EP KR US); **C23C 2/40** (2013.01 - KR US); **C23C 8/00** (2013.01 - KR US); **C21D 2211/002** (2013.01 - EP KR US); **C21D 2211/008** (2013.01 - EP KR US)

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

Designated extension state (EPC)

AL BA HR MK RS

DOCDB simple family (publication)

WO 2007048883 A1 20070503; BR PI0617934 A2 20110809; BR PI0617934 B1 20171212; CA 2627394 A1 20070503; CA 2627394 C 20120417; CN 101400819 A 20090401; CN 104120375 A 20141029; EP 1943368 A1 20080716; EP 1943368 B1 20151209; ES 2561059 T3 20160224; HU E028437 T2 20161228; JP 2009513826 A 20090402; JP 4814949 B2 20111116; KR 100989533 B1 20101025; KR 20080055957 A 20080619; MA 30003 B1 20081201; PL 1943368 T3 20160630; RU 2379373 C1 20100120; UA 87246 C2 20090625; US 11060161 B2 20210713; US 2009025836 A1 20090129; US 2017166991 A1 20170615; US 9611530 B2 20170404; WO 2007048895 A1 20070503; ZA 200803591 B 20090225

DOCDB simple family (application)

FR 2005002689 W 20051027; BR PI0617934 A 20061012; CA 2627394 A 20061012; CN 200680046611 A 20061012; CN 201410334714 A 20061012; EP 06820214 A 20061012; ES 06820214 T 20061012; FR 2006002316 W 20061012; HU E06820214 A 20061012; JP 2008537129 A 20061012; KR 20087010018 A 20061012; MA 30869 A 20080423; PL 06820214 T 20061012; RU 2008121222 A 20061012; UA A200807249 A 20061012; US 201715445774 A 20170228; US 9163506 A 20061012; ZA 200803591 A 20080418